

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 10, 2004, 14:55:14 ; Search time 23 Seconds  
(without alignments)  
1479.196 Million cell updates/sec

Title: US-09-802-285A-2  
Perfect score: 3494  
Sequence: 1 MTTKIFKRIIVFAVIALSSG.....KGKMLTLITNGKQLVLVP 659

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues  
Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*  
1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*  
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*  
3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep.\*  
4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep.\*  
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep.\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3494	100.0	659	1	US-08-258-639A-4
2	3494	100.0	659	2	US-08-900-951-4
3	3494	100.0	659	5	PCT-US95-07391A-4
4	164	4.7	649	4	US-09-134-000C-5302
5	126.5	3.6	698	4	US-09-134-001C-3632
6	124	3.5	23	1	US-08-258-639A-9
7	124	3.5	23	5	US-08-900-951-9
8	124	3.5	23	5	PCT-US95-07391A-9
9	119	3.4	23	1	US-08-258-639A-10
10	119	3.4	23	2	US-08-900-951-10
11	119	3.4	23	5	PCT-US95-07391A-10
12	119	3.4	1138	1	US-07-973-320-2
13	119	3.4	1138	1	US-07-973-320-4
14	118	3.4	772	1	US-08-258-639A-2
15	118	3.4	772	1	US-08-900-951-2
16	118	3.4	772	5	PCT-US95-07391A-2
17	117.5	3.4	1028	4	US-09-543-681A-7181
18	116	3.3	4536	4	US-09-180-422B-27
19	116	3.3	4536	4	US-09-079-030-1
20	115.5	3.3	1168	1	US-08-620-717A-9
21	114.5	3.3	1167	1	US-08-485-568A-6
22	114.5	3.3	1167	2	US-08-590-554A-6
23	114.5	3.3	1167	2	US-09-184-223-6
24	113.5	3.2	1398	1	US-08-750-532-9
25	113.5	3.2	1398	3	US-08-894-818B-8
26	113.5	3.2	1398	4	US-09-445-472-6
27	111	3.2	927	4	US-09-134-001C-4831

28	110	3.1	4563	4	US-09-108-006C-1	Sequence 1, Appli
29	109	3.1	951	3	US-08-816-346-58	Sequence 58, Appl
30	109	3.1	951	3	US-09-335-411-58	Sequence 58, Appl
31	109	3.1	952	2	US-08-788-674-5	Sequence 5, Appli
32	109	3.1	952	3	US-08-816-346-4	Sequence 4, Appli
33	109	3.1	952	3	US-09-335-411-4	Sequence 4, Appli
34	108.5	3.1	1096	4	US-09-134-000C-5764	Sequence 5764, Ap
35	108	3.1	1015	4	US-09-134-000C-6204	Sequence 6204, Ap
36	106	3.0	884	4	US-09-328-352-4598	Sequence 4598, Ap
37	106	3.0	945	4	US-09-198-452A-1030	Sequence 1030, Ap
38	106	3.0	1375	3	US-09-210-361-4	Sequence 4, Appli
39	106	3.0	1375	4	US-09-740-274-4	Sequence 4, Appli
40	105	3.0	443	4	US-09-328-352-6322	Sequence 6322, Ap
41	105	3.0	741	4	US-09-252-991A-22440	Sequence 22440, A
42	105	3.0	965	4	US-09-437-277-3	Sequence 3, Appli
43	104	3.0	1742	4	US-09-386-962C-4	Sequence 4, Appli
44	104	3.0	1849	4	US-08-851-567B-49	Sequence 49, Appl
45	104	3.0	2516	4	US-08-851-567B-47	Sequence 47, Appl

ALIGNMENTS

RESULT 1  
US-08-258-639A-4  
; Sequence 4, Application US/08258639A  
; Patent No. 5681733  
; GENERAL INFORMATION:  
; APPLICANT: Su, Hongsheng  
; APPLICANT: Blain, Francoise  
; APPLICANT: Bennett, Clark  
; APPLICANT: Gu, Kangfu  
; APPLICANT: Zimmermann, Joseph  
; APPLICANT: Musil, Roy  
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression  
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From  
; TITLE OF INVENTION: Flavobacterium heparinum  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hale and Dorr  
; STREET: 1455 Pennsylvania Avenue, N.W.  
; CITY: Washington, D.C.  
; COUNTRY: U.S.A.  
; ZIP: 20004  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA: US/08/258,639A  
; APPLICATION NUMBER: US/08/258,639A  
; FILING DATE: 10 JUNE 1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Healey, William J.  
; REGISTRATION NUMBER: 36,160  
; REFERENCE/DOCKET NUMBER: 104385.116  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202)942-8400  
; TELEFAX: (202)942-8484  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 659 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-258-639A-4

Query Match 100.0%; Score 3494; DB 1; Length 659;  
Best Local Similarity 100.0%; Pred. No. 4.1e-308;  
Matches 659; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MTTKIFKRIIVFAVIALSSGIIITKDFHINLEYSGLKYNKVAAGNYDDAA 60

```

; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/258,639
; FILING DATE: 10 JUNE 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Healey, William J.
; REGISTRATION NUMBER: 36,160
; REFERENCE/DOCKET NUMBER: 104385.116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)942 8400
; TELEFAX: (202)942 8484
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 659 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-900-951-4

Query Match      100.0%; Score 3494; DB 2; Length 659;
Best Local Similarity 100.0%; Pred. No. 4.1e-308;
Matches 659; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MTTKIFKRIIVFAVIALSSGNILAQSSITRKDFHINLEYSGLEKVNKAVAAGNYDDAA 60
DB 1 MTTKIFKRIIVFAVIALSSGNILAQSSITRKDFHINLEYSGLEKVNKAVAAGNYDDAA 60
QY 61 KALLAYREKSKAREPDSNAEKPADIRQPIDKVTREMAADKALVHQFQPHKGYGYPDYGK 120
DB 61 KALLAYREKSKAREPDSNAEKPADIRQPIDKVTREMAADKALVHQFQPHKGYGYPDYGK 120
QY 121 DINQWMPVKDNEVWQLHRVQWQAMALVYHATGDEKVAREWVYQYSDWARKNPLGLSQ 180
DB 121 DINQWMPVKDNEVWQLHRVQWQAMALVYHATGDEKVAREWVYQYSDWARKNPLGLSQ 180
QY 181 DNDKFWRPLEVSQSLPPTFSLFVNSPAPTFAPLMEFLNSYHQADYLSHYAEQGN 240
DB 181 DNDKFWRPLEVSQSLPPTFSLFVNSPAPTFAPLMEFLNSYHQADYLSHYAEQGN 240
QY 241 HRLFEAQRNLFAVSPPEKDSPRWQTGISVLNTEIKKQVYADGMQFELSPIYHVAID 300
DB 241 HRLFEAQRNLFAVSPPEKDSPRWQTGISVLNTEIKKQVYADGMQFELSPIYHVAID 300
QY 301 IFLKAYGSAKRVNLEKEFPQSYVQTVENNIMALISISLPDYNTPMFGDSWITDKNFRMAQ 360
DB 301 IFLKAYGSAKRVNLEKEFPQSYVQTVENNIMALISISLPDYNTPMFGDSWITDKNFRMAQ 360
QY 361 FASWARVFPANQAIKYFATDGKQKAPNLSKALSNAAGFYFRSGWKNATVMVLKASPP 420
DB 361 FASWARVFPANQAIKYFATDGKQKAPNLSKALSNAAGFYFRSGWKNATVMVLKASPP 420
QY 421 GEFHAQPDNGTGFELFIKGRNFTPDAGVYVSGDEAIRMKLNRWYQTRIHSTLTLDNQMV 480
DB 421 GEFHAQPDNGTGFELFIKGRNFTPDAGVYVSGDEAIRMKLNRWYQTRIHSTLTLDNQMV 480
QY 481 ITKARQNKWETGNLDVLTYPNSYPNLDHQRSLVFINKKYFLVDRAIGBATGNLGVHW 540
DB 481 ITKARQNKWETGNLDVLTYPNSYPNLDHQRSLVFINKKYFLVDRAIGBATGNLGVHW 540
QY 541 QLKEDSNPVDKTKNRVYTYTRDGNLMIQSLNADRTSLNEEGKVSYYNKKELRPAFV 600
DB 541 QLKEDSNPVDKTKNRVYTYTRDGNLMIQSLNADRTSLNEEGKVSYYNKKELRPAFV 600
QY 601 FEKPKKNAGTQNFVSIYPYDGOKAPEISIRENKGNDFEKGKMLNTLTINGKQQLVLVP 659
DB 601 FEKPKKNAGTQNFVSIYPYDGOKAPEISIRENKGNDFEKGKMLNTLTINGKQQLVLVP 659

RESULT 2
US-08-900-951-4
; Sequence 4, Application US/08900951
; Patent No. 5919693
; GENERAL INFORMATION:
; APPLICANT: Su, Hongsheng
; APPLICANT: Blain, Francoise
; APPLICANT: Bennett, Clark
; APPLICANT: Gu, Kangfu
; APPLICANT: Zimmermann, Joseph
; APPLICANT: Musil, Roy
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From
; TITLE OF INVENTION: Flavobacterium heparinum
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington, D.C.
; COUNTRY: U.S.A.
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC DOS/MS DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/900,951
; FILING DATE:

```

```

RESULT 3
PCT-US95-07391A-4
; Sequence 4, Application PC/TUS9507391A
; GENERAL INFORMATION:
; APPLICANT: IBEX TECHNOLOGIES and

```



Db 457 ---CGWLKADQNPMEF---RSFTYLSKNSWIIDGFA-----GQKETEITSTYNLA 504  
 QY 592 ---KELKRPFAVPEKPKN---AGTQNFYSIVVYDQKAPKPEISRENK-----GNDF 638  
 Db 505 PSINCKOEAHRFALTNNKHYYTLFAGGQOQSV-----KGSEIYNQINHPRLSNKF 558  
 QY 639 ---EKGLNLTLLTINGKQQLVLP 659  
 Db 559 CVKTKGEIQATVISPLEDIQITP 581

RESULT 5

US-09-134-001C-3632  
 ; Sequence 3632, Application US/09134001C  
 ; Patent No. 6380370  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Lynn Doucette-Stamm et al  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
 ; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
 ; CURRENT FILING DATE: 1997-11-08  
 ; PRIOR APPLICATION NUMBER: US/09/134,001C  
 ; PRIOR FILING DATE: 1998-08-13  
 ; PRIOR APPLICATION NUMBER: US 60/064,964  
 ; PRIOR FILING DATE: 1997-11-08  
 ; PRIOR APPLICATION NUMBER: US 60/055,779  
 ; NUMBER OF SEQ ID NOS: 1997-08-14  
 ; SEQ ID NO 3632  
 ; LENGTH: 698  
 ; TYPE: PRT  
 ; ORGANISM: Staphylococcus epidermidis  
 US-09-134-001C-3632

Query Match 3.6%; Score 126.5; DB 4; Length 698;  
 Best Local Similarity 18.6%; Pred. No. 0.015;  
 Matches 139; Conservative 109; Mismatches 284; Indels 217; Gaps 31;  
 QY 9 IIVFAVIALSSGNI-LAQSSITR--KDFDHINLEYGLEKYNKAVAAGN-----Y 56  
 Db 32 VFIFALVRLGLYLQAGSHYKQLKNDENIT-----VNESVPRGILDRNGKVLV 83  
 QY 57 DDAKALLAYREKAREPDSNAEKPAD-IRPIDKVTREMAKALVHQPHKGYG 115  
 Db 84 DNASKSITYTRNRKTSQKEMLNTAKLTDLIKMDTKITER--DK-----127  
 QY 116 FDYGDKNWQWMP-----VKDNEVRMQLHRV--KWNQA 146  
 Db 128 ---KDFWIQYPSFAKLMRKEQLMLEGDSISQDQFTQDRDKTGKQLKQLTKKQLQV 183  
 QY 147 MALV-----YHATGDEKYAREWVYQYSDMARKNPLGLSQDND 183  
 Db 184 LAIYREMNAGSTLDPQTIKNEVDSEKVAAYSQQLSKLPGVNTTMDWRKYPYG---DTL 240  
 QY 184 KFWVRPLEVSRVSLPTFSLFVNSPAPTAFLMEFLNSVHQQADYLSGTHYAGNHL 243  
 Db 241 RGIIG--DVSTSTGIPKELT-----EQYLSKGYSRNDRVGSYLEYQYEDV 285  
 QY 244 FEAQNLPAVGFPEFKDSPRWRTGISVLNTEIKQYVADGMQPELSPHVAIDFL 303  
 Db 286 LKGTIKQM-----KYITDKSGRVISSEVLNPGSR-----GHDILQLT-----IDIL 326  
 QY 304 KAYGSAKRVN--LREKFPQSVQTVENNIMALISISLPDYNTPMFGDSWITDKNFRMAQF 361  
 Db 327 Q-----KKVESLLEKQISKLSQAKOMDNALMVVQPNKGDILAIAGKQIDKQKLKY 381  
 QY 362 --ASWARVFPANQAIK-YFATDGGKQAPN-----FLSKALSNAGFYFRSGWDKNA-----410  
 Db 382 DIGNFTAQYTVGSSVKGOTGLIAGYQNKAINVGETWDEPLKFKGGLTKRSYFNKNGHVS 441  
 QY 411 -----TVMVLKASPPGFEHQAQPDNGTFFELFKGNFTTTPDAGVYFVSDE 454  
 Db 442 DDQALMHSSNVYMEKTAALKLAGPYTSGMSLPNN-----IADAG-----481

QY 455 AIMKLRNWRQTRIHSHTLTDNQNMVITKARQNKWETGNLNDVLVTNPSYPMLDHQRVS 514  
 Db 482 --RKURKGNLQVGLGKLTGIDLPNETPGQIEPLTNNPGNYDLAIQGYDTYTPQLSQYV 539  
 QY 515 LFINKKYFLV---IDRAIGEATGNLGVHQLKEDSNPFDKTKNRVYVTVYRDNGLMIQS 571  
 Db 540 STIANDGYRIQPHIGLSIYESIN-----KDETGLARKKIKGNVLNKNVNSNDIKEV 591  
 QY 572 LNADRTSLNEBEGKSVYVYNKELKRP-----AFVFE--KPKKNAGTQNFVSVIYV---619  
 Db 592 QEGFKMAFNEKQG--TGYASFRNTVVPVPSAGKTGTAEVFDGEPVNSVTYIGYAPVDDPKLS 650  
 QY 620 ----YDGOKAPELISRENKGNDFEKGKLN 644  
 Db 651 FSIIVTNPQVPPWLV---NGGDLGRDVIN 676

RESULT 6

US-08-258-639A-9  
 ; Sequence 9, Application US/08258639A  
 ; Patent No. 5681733  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Su, Hongsheng  
 ; APPLICANT: Blain, Francoise  
 ; APPLICANT: Bennett, Clark  
 ; APPLICANT: Gu, Kangfu  
 ; APPLICANT: Zimmermann, Joseph  
 ; APPLICANT: Musil, Roy  
 ; TITLE OF INVENTION: Nucleic Acid Sequences And Expression  
 ; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From  
 ; TITLE OF INVENTION: Flavobacterium heparinum  
 ; NUMBER OF SEQUENCES: 26  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Hale and Dorr  
 ; STREET: 1455 Pennsylvania Avenue, N.W.  
 ; CITY: Washington, D.C.  
 ; COUNTRY: U.S.A.  
 ; ZIP: 20004  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/258,639A  
 ; FILING DATE: 10 JUNE 1994  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Healey, William J.  
 ; REGISTRATION NUMBER: 36,160  
 ; REFERENCE/DOCKET NUMBER: 104385.116  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (202)942-8400  
 ; TELEFAX: (202)942-8484  
 ; INFORMATION FOR SEQ ID NO: 9:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 23 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: peptide  
 US-08-258-639A-9

Query Match 3.5%; Score 124; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 9.3e-05;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 414 VLKASPPGFEHQAQPDNGTFFELFI 436  
 Db 1 VLKASPPGFEHQAQPDNGTFFELFI 23

RESULT 7

US-08-900-951-9

```
; Sequence 9, Application US/08900951
; Patent No. 5919693
; GENERAL INFORMATION:
; APPLICANT: Su, Hongsheng
; APPLICANT: Blain, Francoise
; APPLICANT: Bennett, Clark
; APPLICANT: Gu, Kangfu
; APPLICANT: Zimmermann, Joseph
; APPLICANT: Musil, Roy
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From
; TITLE OF INVENTION: Flavobacterium heparinum
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington, D.C.
; COUNTRY: U.S.A.
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC DOS/MS DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/900,951
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/258,639
; FILING DATE: 10 JUNE 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Healey, William J.
; REGISTRATION NUMBER: 36,160
; REFERENCE/DOCKET NUMBER: 104385.116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)942 8400
; TELEFAX: (202)942 8484
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US95-07391A-9
;
; Query Match 3.5%; Score 124; DB 2; Length 23;
; Best Local Similarity 100.0%; Pred. No. 9.3e-05;
; Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; Qy 414 VLKASPPGEFHAQPDNGTFELFI 436
; Db 1 VLKASPPGEFHAQPDNGTFELFI 23
;
; RESULT 9
; US-08-258-639A-10
; Sequence 10, Application US/08258639A
; Patent No. 5681733
; GENERAL INFORMATION:
; APPLICANT: Su, Hongsheng
; APPLICANT: Blain, Francoise
; APPLICANT: Bennett, Clark
; APPLICANT: Gu, Kangfu
; APPLICANT: Zimmermann, Joseph
; APPLICANT: Musil, Roy
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From
; TITLE OF INVENTION: Flavobacterium heparinum
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington, D.C.
; COUNTRY: U.S.A.
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/258,639A
; FILING DATE: 10 JUNE 1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Healey, William J.
; REGISTRATION NUMBER: 36,160
; REFERENCE/DOCKET NUMBER: 104385.116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)942-8400
; TELEFAX: (202)942-8484
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; PCT-US95-07391A-9
;
; Query Match 3.5%; Score 124; DB 2; Length 23;
; Best Local Similarity 100.0%; Pred. No. 9.3e-05;
; Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; Qy 414 VLKASPPGEFHAQPDNGTFELFI 436
; Db 1 VLKASPPGEFHAQPDNGTFELFI 23
;
; RESULT 8
; PCT-US95-07391A-9
; Sequence 9, Application PC/TUS9507391A
; GENERAL INFORMATION:
; APPLICANT: IBEX TECHNOLOGIES and
; APPLICANT: ZIMMERMANN, Joseph
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From
; TITLE OF INVENTION: Flavobacterium heparinum
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington, D.C.
; COUNTRY: U.S.A.
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

LENGTH: 23 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-258-639A-10

Query Match 3.4%; Score 119; DB 1; Length 23;  
Best Local Similarity 91.3%; Pred. No. 0.00026;  
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 101 KALVHQFQPHKGYGFDYDKDIN 123  
DB 1 KALVHWFPHKGYGFDYDKDIN 23

## RESULT 10

US-08-900-951-10  
Sequence 10, Application US/08900951  
Patent No. 5919693  
GENERAL INFORMATION:  
APPLICANT: Su, Hongsheng  
APPLICANT: Blain, Francoise  
APPLICANT: Bennett, Clark  
APPLICANT: Gu, Kangfu  
APPLICANT: Zimmermann, Joseph  
APPLICANT: Musil, Roy  
TITLE OF INVENTION: Nucleic Acid Sequences And Expression  
TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From  
TITLE OF INVENTION: Flavobacterium heparinum  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hale and Dorr  
STREET: 1455 Pennsylvania Avenue, N.W.  
CITY: Washington, D.C.  
COUNTRY: U.S.A.  
ZIP: 20004

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC DOS/MS DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/900,951  
FILING DATE: 10 JUNE 1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/258,639  
FILING DATE: 10 JUNE 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Healey, William J.  
REGISTRATION NUMBER: 36,160  
REFERENCE/DOCKET NUMBER: 104385.116  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)942 8400  
TELEFAX: (202)942 8484

INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 23 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-900-951-10

Query Match 3.4%; Score 119; DB 2; Length 23;  
Best Local Similarity 91.3%; Pred. No. 0.00026;  
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 101 KALVHQFQPHKGYGFDYDKDIN 123  
DB 1 KALVHWFPHKGYGFDYDKDIN 23

## RESULT 11

PCT-US95-07391A-10  
Sequence 10, Application PC/TUS9507391A  
GENERAL INFORMATION:  
APPLICANT: IBEX TECHNOLOGIES and

APPLICANT: ZIMMERMANN, Joseph  
TITLE OF INVENTION: Nucleic Acid Sequences And Expression  
TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From  
TITLE OF INVENTION: Flavobacterium heparinum  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hale and Dorr  
STREET: 1455 Pennsylvania Avenue, N.W.  
CITY: Washington, D.C.  
COUNTRY: U.S.A.  
ZIP: 20004

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/07391A  
FILING DATE: 09-JUNE-1995  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/258,639  
FILING DATE: 10 JUNE 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: BAKER, Hollie L.  
REGISTRATION NUMBER: 31,321  
REFERENCE/DOCKET NUMBER: 104385.116PCT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)942-8400  
TELEFAX: (202)942-8484

INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 23 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
PCT-US95-07391A-10

Query Match 3.4%; Score 119; DB 5; Length 23;  
Best Local Similarity 91.3%; Pred. No. 0.00026;  
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 101 KALVHQFQPHKGYGFDYDKDIN 123  
DB 1 KALVHWFPHKGYGFDYDKDIN 23

## RESULT 12

US-07-973-320-2  
Sequence 2, Application US/07973320  
Patent No. 5286486  
GENERAL INFORMATION:  
APPLICANT: Payne, Jewel M.

APPLICANT: Fu, Jenny M.  
TITLE OF INVENTION: No. 5286486el Bacillus thuringiensis Gene  
TITLE OF INVENTION: Encoding a Coleopteran-Active Toxin  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: David R. Saliwanchik  
STREET: 2421 N.W. 41st Street, Suite A-1  
CITY: Gainesville  
STATE: FL  
COUNTRY: USA  
ZIP: 32606

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25

```

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/973,320
FILING DATE: 19921106
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/788,638
FILING DATE: 6-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Saliwanchik, David R.
REGISTRATION NUMBER: 31,794
REFERENCE/DOCKET NUMBER: MA68.C1
TELEPHONE: 904-375-8100
TELEFAX: 904-372-5800
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1138 amino acids
TYPE: AMINO ACID
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Bacillus thuringiensis
STRAIN: dakota
INDIVIDUAL ISOLATE: HD511
IMMEDIATE SOURCE:
LIBRARY: Lamdagem (TM)-11 library of J.M. Fu
CLONE: 511
US-07-973-320-2

Query Match      3.4%; Score 119; DB 1; Length 1138;
Best Local Similarity 19.8%; Pred. No. 0.16;
Matches 132; Conservative 85; Mismatches 206; Indels 244; Gaps 39;

QY 48 NKAVA-----AGNYDDAAKALLAYREKSKAREPDSNAEKPADIRQIDKVTREMAKAL 103
Db 121 NKALAELEGLNN-----LTIYQQ-----ALEDLNPNDDPATITRVIDRF--RILD-AL 167

QY 104 VHQOPKHGKYGF-----YKGINWCM-----WPKVDNEV-----134
Db 168 PESTYPSFRVAGYEIPLLTVYAQAANGLHALLRSTLYGDKWGFTQNNIENYRQKKHI 227

QY 135 -RWOLHRVKWQA-MALVYHATGDE-----KYAREWVYQSDWAR-----KNPLGLSODND 183
Db 228 SEYNSHCVKYNSGLSLRNGSTYEQWYNYNFRREMILWLDIAAVFPYIDPRMYSMETS 287

QY 184 KFMVR-----PLEVSDRVQSLPTPSLFVNSPAFTPAFLMFLNSYHQOADYLSHYAEQ 238
Db 288 TQLTREVVTDBISLSISNPDIGPSFSQMENTAFRTPHLV-----DYLDELXYTT 336

QY 239 GNHRIF--EAQNLF-----AGVSPEFKDSPRWOTGISVLNTEIKQVADGMOFELSP 292
Db 337 SKYAFSHEIQDFLFWCWHKVSFKKSQSNNLY--TTGI-----YKTSYIISG 384

QY 293 IYHVAADIF-----LKAYGSAKRVNLEKEFPQSYVQTVENMIM 331
Db 385 AYSFRGNDLYRTLAPSVVVPYTONYGVQVEFYGVKGVHYRGD--NKYDLTYSIDQ 442

QY 332 -----ALISISLPYNT-----EMFGDSWITDKNFRMAQFASWARVFP 369
Db 443 LPDGEPIHEKVTRELCHATAISKSTPDYDNATIPF--SW-----THRSAEY--YNIYYP 494

QY 370 AN-----QAIKYFATGKQG--KAPNLSKALSNAGYTFRSCW--DKNATVWLKASPDG 421
Db 495 NKIKIPAVKMYKLDLSTVWVGPGFTGGDLVKG-----SNGYIGDIKATV-----NSPLS 546

QY 422 E-----FHAQPDNGTFELFKGRNFTPDAGVFVYSGDEAIMKLRNWRQTRIHSTLTD 475
Db 547 QKYRVRVYATSVSGLNFVI-----567

QY 476 NQNMWITKARQNKWET--GNLDDVLT-----TNPSYPN-----LDH--QRSVL 515
Db 121 NKALAELEGLNN-----LTIYQQ-----ALEDLNPNDDPATITRVIDRF--RILD-AL 167

Db 568 NDEIALQKNFQSTVETIGEGKD--LYGSPGYEYSTTIOFPNEHPKTIHLHLNLSNNSPF 626
QY 516 FINKKYFLVIDRAIGEAATGNLGVHWQLKEDSNPFDKTKNRVYVTVYRDGNLNM---IQSL 572
Db 627 YVDSIEFIPVD-----VNYDEKEK-----LEKAKAVNTLFTGRNALQKYVTDY 671
QY 573 NADRTSL 579
Db 672 KVDQVSI 678

RESULT 13
US-07-973-320-4
; Sequence 4, Application US/07973320
; Patent No. 5286486
; GENERAL INFORMATION:
; APPLICANT: Payne, Jewel M.
; APPLICANT: Fu, Jenny M.
; TITLE OF INVENTION: No. 5286486el Bacillus thuringiensis Gene
; TITLE OF INVENTION: Encoding a Coleopteran-Active Toxin
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David R. Saliwanchik
; STREET: 2421 N.W. 41st Street, Suite A-1
; CITY: Gainesville
; STATE: FL
; COUNTRY: USA
; ZIP: 32606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/973,320
; FILING DATE: 19921106
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/788,638
; FILING DATE: 6-NOV-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Saliwanchik, David R.
; REGISTRATION NUMBER: 31,794
; REFERENCE/DOCKET NUMBER: MA68.C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 904-375-8100
; TELEFAX: 904-372-5800
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1138 amino acids
; TYPE: AMINO ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Bacillus thuringiensis
; STRAIN: kumamotoensis
; INDIVIDUAL ISOLATE: HD867
; IMMEDIATE SOURCE:
; LIBRARY: Lamdagem (TM)-11 library of J.M. Fu
; CLONE: 867
; US-07-973-320-4

Query Match      3.4%; Score 119; DB 1; Length 1138;
Best Local Similarity 19.8%; Pred. No. 0.16;
Matches 132; Conservative 85; Mismatches 206; Indels 244; Gaps 39;

QY 48 NKAVA-----AGNYDDAAKALLAYREKSKAREPDSNAEKPADIRQIDKVTREMAKAL 103
Db 121 NKALAELEGLNN-----LTIYQQ-----ALEDLNPNDDPATITRVIDRF--RILD-AL 167
```

```
QY 104 VHQFQPHKGYGYED-----YKDIINWQM-----WPVKNEV-----134
Db 168 FESYMPSEFRVAGYEIPLLTVYAQAANLHLALSDSTLYGDKWGFTQNNIENNRKOKHI 227
QY 135 -RQHLRVKWOA-MALVHATGDE-----KYAREWVYQYSDWAR-----KNPLGLSQDND 183
Db 228 SEYSNCHVKWYNSGLSRLNGSTYEQWYNINRFRREMILMVLDAVAFPIYDPRMYSMETS 287
QY 184 KFYWR-----PLEVSRVQSLPPTESLFVNSPAPTFAFLMEFLNSHQADYLSHYAEQ 238
Db 288 TQLTREVYDPTLSLSNPDIGFSQMENTAPRTHLV-----DYLDLYIYIT 336
QY 239 GNRHLF--EAQRNLF-----AGVSFPEFKDSPRWQRTGISVLNTEIKKQVYADGMQFELSP 292
Db 337 SKYKAFSHEITQPLDFWCVHKVSFKSEQSNLY-TTGI-----YKTSGYISSG 384
QY 293 IYHVAIDIF-----LKYGSAKRVNLEKEFFQSYQVTVENMIM 331
Db 385 AISFRGNDIYRTLAAPSVVVYPTQNYGVQEVEFYGVKGHVHYRGD--NKYDLTYDSIDQ 442
QY 332 -----ALISISLPDYNT--PMFGDSWITDKNFRMAQFASWARVFP 369
Db 443 LPDGEPIHEKYTHRLCHTAISKSTPDYDNATIPF--SW-----THRSAEY--YMKIYIP 494
QY 370 AN-----QAIKYPATDGKQ--KAPNLSKALSAGFYTPRSQW--DKNATVMVLKASPPG 421
Db 495 NKIKKIPAVMKYLDLSTVWKGPGFTGGDLVKG--SNGYIGDIKATV-----NSPLS 546
QY 422 E-----FHAQPDNGTFFELFKGRNFTPDAGVFVYSGDEAIMKLRNWRQTRIHSITLTD 475
Db 547 QKYRVVRVRYATSVSGLFNFI-----TNPSYN-----LDH--QRSVL 515
QY 476 NONMVITKARQMKWT--GNLIDLTV-----LTYSGFYLEYSTTQFPNEHPKITLHNLHNSNPPF 626
Db 568 NDEITALQNFQSTVETIGEGKD--LYTSGFYLEYSTTQFPNEHPKITLHNLHNSNPPF 626
QY 516 FINKKYFLVIDRAIGEATGNLGVHQLKEDSNPFDKTKNRYTYTYRDGNLNM-----IQSL 572
Db 627 YVDSIEFIPVD-----VNYDEKEK-----LEKAQKAVNTLFTFGRNALQKYVTDY 671
QY 573 NADRTSL 579
Db 672 KVDQVSI 678

RESULT 14
US-08-258-639A-2
; Sequence 2, Application US/08258639A
; Patent No. 5681733
; GENERAL INFORMATION:
; APPLICANT: Su, Hongsheng
; APPLICANT: Blain, Francoise
; APPLICANT: Bennett, Clark
; APPLICANT: Gu, Kangfu
; APPLICANT: Zimmermann, Joseph
; APPLICANT: Musil, Roy
; TITLE OF INVENTION: Nucleic Acid Sequences And Expression
; TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From
; TITLE OF INVENTION: Flavobacterium heparinum
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr
; STREET: 1455 Pennsylvania Avenue, N.W.
; CITY: Washington, D.C.
; COUNTRY: U.S.A.
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
```

```
; APPLICATION NUMBER: US/08/258,639A
; FILING DATE: 10 JUNE 1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Healey, William J.
; REGISTRATION NUMBER: 36,160
; REFERENCE/DOCKET NUMBER: 104385.116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)942-8400
; TELEFAX: (202)942-8484
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 772 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-258-639A-2
```

```
Query Match 3.4%; Score 118; DB 1; Length 772;
Best Local Similarity 20.5%; Pred. No. 0.11;
Matches 128; Conservative 79; Mismatches 229; Indels 188; Gaps 30;

QY 145 QAMALVYHATGDEKYAREWVYQYSD--WARKNPLG--LSQDNDKFWRPLEYSDRV--QS 198
Db 109 ELMALNYLMTWPKYVGREAITSIITLETATFKPADISRGIGLFWVTGAIYDMCYDOL 168
QY 199 LPPTESLFWNS-----PAFTFAFLMEFLNSHQADYLSHYAEQGNHRLPEA 246
Db 169 KPEEKTRFVKAFVRLAKMLECGYPVKDKSIVGHASEWMIMEDLLSVGIAIYDE--PPE 225
QY 247 QRNLFAGVSFPEFKDSPW-----RQTGISVLNTEIKKQVYA-----DGM 286
Db 226 MYNLAAGFFKEHLVARNWYFPHSHYHQQMSYLNFTNDLFALWILDMGAGNVFNPCQ 285
QY 287 QFELSPIYHVAIDIFLKAYGSAKRVNLEKEFFQSYQVTVENMIMALISLPLDYNTPMF 346
Db 286 QFILYDALYKRRPDGOIILAGD--VDYSRKKPKIYT-----MELLAGSY--YKDEVL 334
QY 347 GDSWITDKNFRMAQFASWARVFPANQAIKYFATDGKQ--KAPNLSKAL--SNAGFYTF 402
Db 335 NYEFLKDPN-----VEPHCKLFEFLWRDTQLGSRKXPDDLPLSRYSGPSFGWMTA 383
QY 403 RSGWDMKNATVMVLKASPPGEF--HAQPDNGTFFELFKGRNFTPDAGVFV--YSGDEAIM 457
Db 384 RTGMPESVIAEMKVN--EYSLNHOHQDAGAFQIYKQ--PLAIDAGSYTGSSGGYNP 439
QY 458 KLRNWRQTRIHSITLT-----DNQNMVITKARO-----486
Db 440 HNKNFRTTIAHNSLLIYDPKETFSYSGYSGSDHTDFAANDGGORLPCKGWIAPRDLKEM 499
QY 487 --NKWETGNL-----DVLTYTNPSYNL-----DHQSRVLFINK--520
Db 500 LAGDFRTGKILAQGFDPDQNT--PDYTLKGDITAAYSKAKVKSFLNLKDKAKVP 556
QY 521 -YFLVIDRAIGEATGNLGVHQLKEDSNPFDK-----TKRVVITYRDGN--566
Db 557 AMLVFDKVA-----SNPDFKKFLLHLSIEQPEIKGNQITIKETKNGDS 601
QY 567 -----LMIQSLNADRTSLNEEBGKSYVY-----NKLKRPAPVPE--KPKK 606
Db 602 GMLVNTALLPDAANSNITSIG--GKGDQFWFGTYNDPKGTDEALERGERWVEITPKK 660
QY 607 NAGTQNFVSIYVDG--QKAPFI 628
Db 661 AAAEDYLVNVIQIADNTQOKLHEV 684
```

```
RESULT 15
US-08-900-951-2
; Sequence 2, Application US/08900951
; Patent No. 5919693
; GENERAL INFORMATION:
; APPLICANT: Su, Hongsheng
```



APPLICANT: Blain, Francoise  
APPLICANT: Bennett, Clark  
APPLICANT: Gu, Kangfu  
APPLICANT: Zimmermann, Joseph  
APPLICANT: Musil, Roy  
TITLE OF INVENTION: Nucleic Acid Sequences And Expression  
TITLE OF INVENTION: Systems For Heparinase II And Heparinase III Derived From  
TITLE OF INVENTION: Flavobacterium heparinum  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hale and Dorr  
STREET: 1455 Pennsylvania Avenue, N.W.  
CITY: Washington, D.C.  
COUNTRY: U.S.A.  
ZIP: 20004  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC DOS/MS DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/900,951  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/258,639  
FILING DATE: 10 JUNE 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Healey, William J.  
REGISTRATION NUMBER: 36,160  
REFERENCE/DOCKET NUMBER: 104385.116  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)942 8400  
TELEFAX: (202)942 8484  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 772 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-900-951-2

Query Match 3.4%; Score 118; DB 2; Length 772;  
Best Local Similarity 20.5%; Pred. No. 0.11;  
Matches 128; Conservative 79; Mismatches 229; Indels 188; Gaps 30;

Qy	145	QAMALVYHATGDEKAREWVQYSD---	WARKNPLG-LSQNDKRFVWRPLEVSDRV--	QS	198
Db	109	ELMALNYLMTKDPKVGRAITSIIDT	LTATFKPAGDISRGIGLPMVTGAIVD	WCYDQL	168
Qy	199	LPPTFSLFVNS-----	PAFTAFMEFLNSHQADYLSHYAQGNHRL	FEA	246
Db	169	KPEEKTRFVKAFVRLAKMCEGYPV	KDKSIVGHASEWIMRDLISVGIAIYDE	---	PPE 225
Qy	247	QRNLFAGVSFEFKDSPW-----	RQTGISVLNTEIKKQVYA-----	DGM	286
Db	226	MYNLAAGRFFKEHLVARNWFESH	NYHOGMSYLVNRTNDFALMILDRMAG	NVFNFGQ	285
Qy	287	QFELSPIYHVAADIFLKAYGSAK	VNLEKFPQSYQVQTVENMIMALIS	ISLPDYNTPMF	346
Db	286	QFILDYAIYKRRPDQIILAGD---	VDYSRKKPKYTT-----	MPALLAGSY--	YKDEVL 334
Qy	347	GDSWITDKNFRMAQFASWARV	EPANQAIKYFATDGKQG- KAPNFLSKAL---	SNAGFYTF	402
Db	335	NYEFLKDN-----	VEPHCKLFEFLWRDTQLGSRKPD	DLPLSRYSGSPFGWMIA	383
Qy	403	RSGWDXNATVMVLKASPPGEP---	HAQPDNGTFELFKGRNFTPDAGV	FV- YSGDEALM	457
Db	384	RTGWPSPESIAEMKYN---	EYSFLNHQHQDAGAFQIYYKG- PL	AIDAGSYTSGSGYNP	439
Qy	458	KLNRNRYOTRIHSTLTLL-----	DNQNMVITKARQ-----		486
Db	440	HNKNFFKRTIANSLIIVDPKETF	SSSGYGGSDHTDFAANDGGQRL	PGKGIAPRDLKEM	499

Qy	487	--NKWETGNML-----	DVLTYTNPSYPNL-----	DHQRSVLFINKK-----	520
Db	500	LAGDFRTGKILAQGFQPDNQT---	PDYTYLKGDITAAYSAKVKEVKRS	FLNLKDAKVP	556
Qy	521	-YFLVIDRAIGEATGNLGVHQL	KEDSNPVFDK-----	TKNRVYTYTVDGNN--	566
Db	557	AMIVFDKVA-----	SNPDFKKFWLLHSIEQPEIKGNQ	ITIKETKNGDS	601
Qy	567	-----	LMIQSLNADRTSLNEBEGKSVYY	-----	NKELKRPFAFVE-KPKK 606
Db	602	GMLVNTALLPDAANSNITSIG-	GKGKDFWVFGTYNTDPKPGT	DEALERGERWVEITPKK	660
Qy	607	NAGTONFVSIVYPYDG--	OKAPEI	628	
Db	661	AAAEYVLNVIQIADNTQQKL	HEV	684	

Search completed: March 10, 2004, 15:00:55  
Job time : 24 secs

This Page Blank (uspto)

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 10, 2004, 14:59:30 ; Search time 39 Seconds  
(without alignments)  
3567.949 Million cell updates/sec

Title: US-09-802-285A-2

Perfect score: 3494

Sequence: 1 MTKIKFRIIVFAVIALSSG.....KGNLTLTKGQQLVLP 659

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 809742 seqs, 211153259 residues

Total number of hits satisfying chosen parameters: 809742

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

- 1: /cgn2\_6/ptodata/2/pubaa/US07\_PUBCOMB.pep.\*
- 2: /cgn2\_6/ptodata/2/pubaa/PCT\_NEW\_PUB.pep.\*
- 3: /cgn2\_6/ptodata/2/pubaa/US06\_NEW\_PUB.pep.\*
- 4: /cgn2\_6/ptodata/2/pubaa/US06\_PUBCOMB.pep.\*
- 5: /cgn2\_6/ptodata/2/pubaa/US07\_NEW\_PUB.pep.\*
- 6: /cgn2\_6/ptodata/2/pubaa/PCTUS\_PUBCOMB.pep.\*
- 7: /cgn2\_6/ptodata/2/pubaa/US08\_NEW\_PUB.pep.\*
- 8: /cgn2\_6/ptodata/2/pubaa/US08\_PUBCOMB.pep.\*
- 9: /cgn2\_6/ptodata/2/pubaa/US09A\_PUBCOMB.pep.\*
- 10: /cgn2\_6/ptodata/2/pubaa/US09B\_PUBCOMB.pep.\*
- 11: /cgn2\_6/ptodata/2/pubaa/US09C\_PUBCOMB.pep.\*
- 12: /cgn2\_6/ptodata/2/pubaa/US09\_NEW\_PUB.pep.\*
- 13: /cgn2\_6/ptodata/2/pubaa/US10A\_PUBCOMB.pep.\*
- 14: /cgn2\_6/ptodata/2/pubaa/US10B\_PUBCOMB.pep.\*
- 15: /cgn2\_6/ptodata/2/pubaa/US10C\_PUBCOMB.pep.\*
- 16: /cgn2\_6/ptodata/2/pubaa/US10\_NEW\_PUB.pep.\*
- 17: /cgn2\_6/ptodata/2/pubaa/US60\_NEW\_PUB.pep.\*
- 18: /cgn2\_6/ptodata/2/pubaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	128	3.7	25	9	US-09-802-285-3
2	128	3.7	25	14	US-10-291-337-3
3	123	3.5	532	15	US-10-369-493-22074
4	120	3.4	677	15	US-10-369-493-23212
5	118.5	3.4	579	15	US-10-369-493-2315
6	118.5	3.4	579	15	US-10-369-493-2321
7	117	3.3	1163	15	US-10-452-024-107
8	117	3.3	1250	10	US-09-769-736-10
9	116	3.3	4563	10	US-09-802-640-32
10	115.5	3.3	1314	15	US-10-369-493-1532
11	115.5	3.3	1331	9	US-09-801-368-370
12	114.5	3.3	645	14	US-10-130-973A-8
13	114.5	3.3	1279	10	US-09-882-227-388
14	114	3.3	871	15	US-10-369-493-13471
15	114	3.3	899	15	US-10-369-493-5864

16	113.5	3.2	1398	13	US-10-090-624-6	Sequence 6, Appli
17	113	3.2	2179	14	US-10-224-999A-3481	Sequence 3481, Ap
18	111.5	3.2	846	15	US-10-320-797-3302	Sequence 3302, Ap
19	111	3.2	723	15	US-10-369-493-10942	Sequence 10942, A
20	110.5	3.2	563	9	US-09-815-242-5665	Sequence 5665, Ap
21	110.5	3.2	578	9	US-09-815-242-12206	Sequence 12206, A
22	110	3.1	4563	9	US-09-870-759-128	Sequence 128, App
23	110	3.1	4563	10	US-09-751-708A-128	Sequence 128, App
24	109.5	3.1	966	15	US-10-099-322-72	Sequence 72, Appl
25	109.5	3.1	966	15	US-10-044-564-72	Sequence 72, Appl
26	107.5	3.1	1336	10	US-09-934-455-22	Sequence 22, Appl
27	107.5	3.1	1336	14	US-10-278-173-128	Sequence 128, App
28	107.5	3.1	1336	15	US-10-225-067-92	Sequence 92, Appl
29	107.5	3.1	1336	15	US-10-374-780A-204	Sequence 204, Appl
30	107	3.1	660	14	US-10-130-973A-12	Sequence 12, Appl
31	106.5	3.0	561	15	US-10-369-493-23071	Sequence 23071, A
32	106.5	3.0	662	14	US-10-032-585-7128	Sequence 7128, Ap
33	106.5	3.0	862	14	US-10-130-973A-4	Sequence 4, Appli
34	106.5	3.0	887	14	US-10-130-973A-6	Sequence 6, Appli
35	106	3.0	584	15	US-10-369-493-18476	Sequence 18476, A
36	106	3.0	945	15	US-10-289-762-1030	Sequence 1030, Ap
37	106	3.0	1375	9	US-09-740-274-4	Sequence 4, Appli
38	105.5	3.0	1167	9	US-09-815-242-11522	Sequence 11522, A
39	105.5	3.0	1291	15	US-10-369-493-20301	Sequence 20301, A
40	105	3.0	473	15	US-10-369-493-19753	Sequence 19753, A
41	105	3.0	473	15	US-10-369-493-23309	Sequence 23309, A
42	105	3.0	965	10	US-09-842-484A-2	Sequence 2, Appli
43	105	3.0	965	14	US-10-184-485-3	Sequence 3, Appli
44	105	3.0	1135	10	US-09-759-130B-42	Sequence 42, Appl
45	105	3.0	1143	15	US-10-369-493-6511	Sequence 6511, Ap

## ALIGNMENTS

RESULT 1  
US-09-802-285-3 ; Sequence 3, Application US/09802285  
; Patent No. US20020122793A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Dongfang  
; APPLICANT: Pojasek, Kevin  
; APPLICANT: Shriver, Zachary  
; APPLICANT: Holley, Kristine  
; APPLICANT: El-Shabrawi, Yosuf  
; APPLICANT: Venkataraman, Ganesh  
; APPLICANT: Sasisekharan, Ram  
; TITLE OF INVENTION: Heparinase III and Uses Thereof  
; FILE REFERENCE: M0656/7063HCL  
; CURRENT APPLICATION NUMBER: US/09/802,285  
; CURRENT FILING DATE: 2001-03-08  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3  
; LENGTH: 25  
; TYPE: PRT  
; ORGANISM: Flavobacterium heparinum  
US-09-802-285-3

Query Match 3.7%; Score 128; DB 9; Length 25;  
Best Local Similarity 100.0%; Pred. No. 7.9e-05;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 280 QVYADGMQFELSPIYHVAADIFLK 304

Db 1 QVYADGMQFELSPIYHVAADIFLK 25

## RESULT 2

US-10-291-337-3 ; Sequence 3, Application US/10291337  
; Publication No. US20030095628A1  
; GENERAL INFORMATION:

```
; APPLICANT: Liu, Dongfang
; APPLICANT: Pojasek, Kevin
; APPLICANT: Shriver, Zachary
; APPLICANT: Holley, Kristine
; APPLICANT: El-Shabrawi, Yosuf
; APPLICANT: Venkataraman, Ganesh
; APPLICANT: Sasisekharan, Ram
; TITLE OF INVENTION: Heparinase III and Uses Thereof
; FILE REFERENCE: M0656/7063HCL
; CURRENT APPLICATION NUMBER: US/10/291,337
; CURRENT FILING DATE: 2002-11-08
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Flavobacterium heparinum
US-10-291-337-3

Query Match
 3.7%; Score 128; DB 14; Length 25;
Best Local Similarity 100.0%; Pred. No. 7.9e-05;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 280 QVYADGMQFELSPIYHVAIDIFLK 304
Db 1 QVYADGMQFELSPIYHVAIDIFLK 25

RESULT 3
US-10-369-493-22074
; Sequence 22074, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 22074
; LENGTH: 532
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-369-493-22074

Query Match
 3.5%; Score 123; DB 15; Length 532;
Best Local Similarity 18.9%; Pred. No. 0.027;
Matches 109; Conservative 76; Mismatches 179; Indels 214; Gaps 31;

QY 94 VTREMADKALVHOFOPHKG---GYEDYGDINQWQW-PVKDNEVRWQLHRVKKWQAM 147
Db 21 MTNETSDRLVH-FTNKGWMDPNGLWTDEKDAKHLFYQXNPNDTW--GTFPLWG-- 75

QY 148 ALVYHATGDEKAREVWYQYSDWARKNPLGLSDNDKFWVRPLEVSDRVQSLPPTSLFV 207
Db 76 ----HATSDD-----LTNW-EDQPIAIAPKN----- 97

QY 208 NSPAPTPAELMEF-----LNSVHQADYLSTHYAQGNHRLFE 245
Db 98 DSGAFSGMVVYNNNTSGFNDDTIDPRQCVAIWYNTPESEBQYIS--YSLDGGYTFTE 155

QY 246 AQNLFPAGVSFPFKD-----SPRWEQTGLSVLNTETKKQVYAD----- 284
Db 156 YQKNPVLANSQFRPKVFWFEPFSQKMTW--AAKSQDYKIEIYSSDDLKSWKLESAPA 213

QY 285 -----GMQFEL-----SPIYHVAIDI-----FLKAY 306

; APPLICANT: Li, Dongfang
; APPLICANT: Pojasek, Kevin
; APPLICANT: Shriver, Zachary
; APPLICANT: Holley, Kristine
; APPLICANT: El-Shabrawi, Yosuf
; APPLICANT: Venkataraman, Ganesh
; APPLICANT: Sasisekharan, Ram
; TITLE OF INVENTION: Heparinase III and Uses Thereof
; FILE REFERENCE: M0656/7063HCL
; CURRENT APPLICATION NUMBER: US/10/291,337
; CURRENT FILING DATE: 2002-11-08
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 25
; TYPE: PRT
; ORGANISM: Flavobacterium heparinum
US-10-291-337-3

Query Match
 3.7%; Score 128; DB 14; Length 25;
Best Local Similarity 100.0%; Pred. No. 7.9e-05;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 280 QVYADGMQFELSPIYHVAIDIFLK 304
Db 1 QVYADGMQFELSPIYHVAIDIFLK 25

RESULT 4
US-10-369-493-23212
; Sequence 23212, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 23212
; LENGTH: 677
; TYPE: PRT
; ORGANISM: Bacillus subtilis
US-10-369-493-23212

Query Match
 3.4%; Score 120; DB 15; Length 677;
Best Local Similarity 18.8%; Pred. No. 0.073;
Matches 123; Conservative 83; Mismatches 216; Indels 232; Gaps 32;

QY 41 YSGLEKVNKVAAGNYDDAAKALLAY---REKSKAREPDPFSAEKPADIROPIDKVTRE 97
Db 105 FSGSAVVDKNTSGFTGKEPLVAIYTDREGHQVQSIAYGNDK-----GRTWTK 155

QY 98 MADKALVHOFQPHKGYGFDYCKDINWQWPKDNEVRWQLHRVKKWQAMA-----LVTH 152
Db 156 YAGNFPV-----ENPG-----KKDF-----RDPKVFMYEKEKKWVWVLAAGDRILIY- 197

QY 153 ATGDEKYAREWYQYSDWARKNPLGLSDNDKFWVRPLEVSDRVQSLPPTSLFVNSPAP 212
Db 198 ----TSKNLKQWY-----ASEFGDQDQSHGVW-----ECPLDFELPVDGNFN 237

QY 213 TPAFLMEF-----LNSVHQADYLSTHYAQGNHRLF-BAQNLFPAGVSFPF 259
Db 238 QKKWVQVSVGVNGAVSGSGMGYFVGDFDGTGFKNENPNKVLWTDYGRDFAAVSWSDI 297

QY 260 ---KDSPR-----WQGTGLSVLNTETKKQVYADGMQFELSPIYHVA 298
Db 298 PSTDSRRLLWGMWSNQVANDVPTSPWRS--TSIPRELKKAFTGVRVQVTPVKELET 355

QY 299 I-----DIFLKAYGSAKRVNLE-KEFPQS-----YVQTVENMIM--- 331
```

Db 356 IRGTSKKWKNLTISPASHNVLAGSGDAYEINAEFKVSPGSAABFGFKVATGENQFTKVG 415  
QY 332 -----ALISISLPDYNTPMFGDSWITDKN---FRMAQFASWARVFPANQAIKYFATDGKQ 383  
Db 416 YDRNAKLFVDRSESGNDTNPATNCKETAPLKPVNGKYKLRIFVDRSSVEFGNDGKQ 475  
QY 384 GKA-----PNFLSKAL-----SNAG-----FYFRSGWKNKATVNVWLK 416  
Db 476 VITDIILPDRSSKGLLEYAANGVVKVKSLLTHPLKKVWGTTPFMSNMTGW---TTV--- 528  
QY 417 ASPPGFHAQPDNGTTELFYKGRNFTPDAGVFVYS-----GDEA 455  
Db 529 -----NGTWADTTEGQGRSDGDSFILSSASGDFYVESDITIKOGRGAGA 576  
QY 456 IMKLNRWYQTRHSTLTLDNQNNVITKARQNKWETGNNLDVLTYNPSYPNLDHORSVL 515  
Db 577 LM-----FRSDKDAKNGYLVANVDAKHDLVKFFKFNAGSAASVIAEYKTP-----I 620  
QY 516 FINKKYFL-----VIDRAIGEA-----TGNLGVH-WOLKEDSNPVF 550  
Db 621 DVNKKYHLKTEABGDRFKIYLDLDELVIDAHDVSFSEGFGLNVW---DATAVF 670

RESULT 5  
US-10-369-493-2315  
; Sequence 2315, Application US/10369493  
; Publication No. US20030233675A1  
; GENERAL INFORMATION:  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Chen, Xianfeng  
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
; FILE REFERENCE: 38-10(52052)B  
; CURRENT APPLICATION NUMBER: US/10/369,493  
; CURRENT FILING DATE: 2003-02-28  
; PRIOR APPLICATION NUMBER: US 60/360,039  
; PRIOR FILING DATE: 2002-02-21  
; NUMBER OF SEQ ID NOS: 47374  
; SEQ ID NO 2315  
; LENGTH: 579  
; TYPE: PRT  
; ORGANISM: Schizosaccharomyces pombe  
US-10-369-493-2315

Query Match 3.4%; Score 118.5; DB 15; Length 579;  
Best Local Similarity 20.9%; Pred. No. 0.079;  
Matches 111; Conservative 75; Mismatches 195; Indels 151; Gaps 31;  
QY 112 GYGFDYGDKNQWMPVKD-NEVRWOLHRVKWQAMALVYHATGDEKYAREWVYQYSDW 170  
Db 70 GYDVSDY-KQIDSRYGTLDELRLMKALHERDMKLVMDLVNHTSDQ---HEW-FKESRS 124  
QY 171 ARKNPLGLSDNDKFWWRPLEVSDRVQSLPPTFSLVNSPAFTPAFLMEFLNSVHQADY 230  
Db 125 SKTNP-----KRDWYFWKPARYNEKGERLPP-----NNWRSYFDT 159  
QY 231 LSTHYAEOGNHRLFEAQNLFAGVSPFEFK-DSPRWRQTGISVLNTEIKKQVYADGMQFE 289  
Db 160 SANEWDATQ-----EYLLHWS-VGQPDNLNWEIPKVEAVHDILRFWLDGRGV---DG--FR 210  
QY 171 ARKNPLGLSDNDKFWWRPLEVSDRVQSLPPTFSLVNSPAFTPAFLMEFLNSVHQADY 230  
Db 125 SKTNP-----KRDWYFWKPARYNEKGERLPP-----NNWRSYFDT 159  
QY 231 LSTHYAEOGNHRLFEAQNLFAGVSPFEFK-DSPRWRQTGISVLNTEIKKQVYADGMQFE 289  
Db 160 SANEWDATQ-----EYLLHWS-VGQPDNLNWEIPKVEAVHDILRFWLDGRGV---DG--FR 210  
QY 290 LSPYHYVAADIDFLKA-----YGSARKVNLEKEFPQSYVQTVENMIMALI 334  
Db 211 LDAINMISKQRFELDAPITDDRYEYQLAYQYANGPRIH-----EYLNIGINI----- 258  
QY 335 SISLPDYNTPMFGD-SWITDKN-----FRMAQFASWARVFPANQAIKYFATD 380  
Db 259 ---LTEYDAFSGVEMPVYLDNEILHVVGADRRRLTMIFQDFVDLDDPNQH-KYIEGS 314  
QY 290 LSPYHYVAADIDFLKA-----YGSARKVNLEKEFPQSYVQTVENMIMALI 334  
Db 211 LDAINMISKQRFELDAPITDDRYEYQLAYQYANGPRIH-----EYLNIGINI----- 258  
QY 335 SISLPDYNTPMFGD-SWITDKN-----FRMAQFASWARVFPANQAIKYFATD 380  
Db 259 ---LTEYDAFSGVEMPVYLDNEILHVVGADRRRLTMIFQDFVDLDDPNQH-KYIEGS 314  
QY 381 GKQKAPNFLSK-----ALSNAGF-YTFRSGWKNKATV-MVLKASPPGFEHQAQPDNGTFEL 434

Db 315 WELSDLKSLKWQSALLSGGWNASFIENHDQTRTVSRYLSDPKRYAYSSKLMALFII 374  
QY 435 FIKGRNFTPDAGVYVSGDEAIMKLRNWRQTRHSTLTLDNQNNVITKARQNKWETGNN 494  
Db 375 FQSG---TP---FVFGQE--LALANI PRDWPIDEYLDVETQNF-----WK----- 412  
QY 495 LDVLTYNPSYPNLDHORSVLFINKKYFLVIDRAIGEATGNLGVHOLKEDSNPVFDTK 554  
Db 413 --LFMSGNPSQERI--EKTMDIVNKR-----ARDNGRTPMHW---DSSPNGGFTK 455  
QY 555 -----NRVVTYTPDGNLMIQSLNADRTSLNEEGKVSY-----VYNKELK 595  
Db 456 AGVKPMWRVTNDYKEWN-----AAQVNDPESPYTFWSKALELRKELK 498

RESULT 6  
US-10-369-493-2321  
; Sequence 2321, Application US/10369493  
; Publication No. US20030233675A1  
; GENERAL INFORMATION:  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Chen, Xianfeng  
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
; FILE REFERENCE: 38-10(52052)B  
; CURRENT APPLICATION NUMBER: US/10/369,493  
; CURRENT FILING DATE: 2003-02-28  
; PRIOR APPLICATION NUMBER: US 60/360,039  
; PRIOR FILING DATE: 2002-02-21  
; NUMBER OF SEQ ID NOS: 47374  
; SEQ ID NO 2321  
; LENGTH: 579  
; TYPE: PRT  
; ORGANISM: Schizosaccharomyces pombe  
US-10-369-493-2321

Query Match 3.4%; Score 118.5; DB 15; Length 579;  
Best Local Similarity 20.9%; Pred. No. 0.079;  
Matches 111; Conservative 75; Mismatches 195; Indels 151; Gaps 31;  
QY 112 GYGFDYGDKNQWMPVKD-NEVRWOLHRVKWQAMALVYHATGDEKYAREWVYQYSDW 170  
Db 70 GYDVSDY-KQIDSRYGTLDELRLMKALHERDMKLVMDLVNHTSDQ---HEW-FKESRS 124  
QY 171 ARKNPLGLSDNDKFWWRPLEVSDRVQSLPPTFSLVNSPAFTPAFLMEFLNSVHQADY 230  
Db 125 SKTNP-----KRDWYFWKPARYNEKGERLPP-----NNWRSYFDT 159  
QY 231 LSTHYAEOGNHRLFEAQNLFAGVSPFEFK-DSPRWRQTGISVLNTEIKKQVYADGMQFE 289  
Db 160 SANEWDATQ-----EYLLHWS-VGQPDNLNWEIPKVEAVHDILRFWLDGRGV---DG--FR 210  
QY 290 LSPYHYVAADIDFLKA-----YGSARKVNLEKEFPQSYVQTVENMIMALI 334  
Db 211 LDAINMISKQRFELDAPITDDRYEYQLAYQYANGPRIH-----EYLNIGINI----- 258  
QY 335 SISLPDYNTPMFGD-SWITDKN-----FRMAQFASWARVFPANQAIKYFATD 380  
Db 259 ---LTEYDAFSGVEMPVYLDNEILHVVGADRRRLTMIFQDFVDLDDPNQH-KYIEGS 314  
QY 381 GKQKAPNFLSK-----ALSNAGF-YTFRSGWKNKATV-MVLKASPPGFEHQAQPDNGTFEL 434  
Db 315 WELSDLKSLKWQSALLSGGWNASFIENHDQTRTVSRYLSDPKRYAYSSKLMALFII 374  
QY 435 FIKGRNFTPDAGVYVSGDEAIMKLRNWRQTRHSTLTLDNQNNVITKARQNKWETGNN 494  
Db 375 FQSG---TP---FVFGQE--LALANI PRDWPIDEYLDVETQNF-----WK----- 412  
QY 495 LDVLTYNPSYPNLDHORSVLFINKKYFLVIDRAIGEATGNLGVHOLKEDSNPVFDTK 554

Db 413 --LPMGPNFQREI--EKTMDIVNR-----ARDNCRPMHW-----DSPNGGFTK 455  
QY 555 -----NRVYTYRDGNLMIOSLNADRTSLNEEGKVS-----VYNKELX 595  
Db 456 AGVKPMRVYNDYKEWN-----AAQVNDPESPYTFWSKALELRKELX 498

## RESULT 7

US-10-452-024-107  
; Sequence 107, Application US/10452024  
; Publication No. US20040013687A1  
; GENERAL INFORMATION:  
; APPLICANT: Simpson, Lance  
; APPLICANT: Park, Jung-Beak  
; APPLICANT: Maksymowich, Andrew  
; TITLE OF INVENTION: Compositions and Methods For Transsepithelial Molecular Transport  
; FILE REFERENCE: 9855-96U1  
; CURRENT APPLICATION NUMBER: US/10/452,024  
; PRIOR FILING DATE: 2003-06-02  
; PRIOR APPLICATION NUMBER: 60/384,949  
; PRIOR FILING DATE: 2002-05-31  
; NUMBER OF SEQ ID NOS: 188  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 107  
; LENGTH: 1163  
; TYPE: PR1  
; ORGANISM: Clostridium botulinum  
US-10-452-024-107

Query Match 3.3%; Score 117; DB 15; Length 1163;  
Best Local Similarity 17.1%; Pred. No. 0.32;  
Matches 141; Conservative 129; Mismatches 280; Indels 274; Gaps 38;

QY 17 LSSGNLAQSSITRKDF-----DHINLEYSGLKVNKVAAGNVDAAKALIA 65  
Db 380 LMKSNVYDGLKGTWNNFYAVYKIPYNIIGDEYHINYSLNNVN-VEEINNIPPINDIY 438  
QY 66 YVREKSKAREPDFS-----NAEKPADIROPIDKVT-----EMADKALV 104  
Db 439 PFKNSDPPFIPYNTETKEINTTLPISVYLOAQVNTSNDINLSDFSKVTSLKDRSLV 498  
QY 105 HQFQPHKGYGYP-----YKGDIN-----WQWPVKDNEVRWQLHRVKNW 144  
Db 499 YSELDNT-IDYLSIKYDEPINTDKKYLWLKEIFRNYSDFTETQEVNIPGINKVYVP 557  
QY 145 QAMALVIYATGEKAREWYQYSDWARKNPLGLSQDNDKFVWRPLEVSDRVQSL----- 199  
Db 558 LKALNINLTGNS-----FIEBFTLGPISLKNKENIIMPKEIDEIENSMLNLSF 609  
QY 200 ----PPTSLFVNSPAFTPAFLMEFLNSVHOQADYLSHY-----AEQ----- 238  
Db 610 KDLSENLFNIFSKNNSYFEKIYDFLDQWTO--YYSQYFDLICMAKRSVLAEQSLIKKI 667  
QY 239 ----GNHRLFE-----AQRN-----LFAVGS 255  
Db 668 IQKLSYLGNSIGADNLVLMNLTTNLTDRISNESQIAMNVDSFLNSAALCVPEGNI 727  
QY 256 PEF-----KDSPRWPGISVLNTE-----IKQVYADGMQFELSPIVHVAAI 299  
Db 728 YPKFISFMEQCNINKNTRFETQKNTITENEKLIQNNRIFIS-SLDPDFLINIEN----- 782  
QY 300 DIFLKAYGSAKVNLEKEFPQYQVTVENMIMALISISLPDNTMPFGDSMTIDKNFRMA 359  
Db 783 ---LAKSLFSEALLIKEETSYE-----LVLYAFQEPDNN--IGDA--SAKNTSIE 828  
QY 360 QFASWARYF-----PANQAIKYFATDGKQKAPNPLSKALSAGFYTFRSGWDKN 409  
Db 829 YSKDIDLVIYINGDALYLANGANQSISF-----SNDFFENGLTNSFSIYF---WLRN 876  
QY 410 ATVMVLKASPPGCFEHAQPDNGTFELFIKRNFTPDAGVVF-----YSGDEATMLKNRWTRQ 465  
Db 877 LKOTIKSKLIG---SKEDNCGWEIYFQ-----DTGLVFNMDISNGNEKIYLSDSVNN 927

QY 466 TRIHSTLTLD-----NONMVTIKARQ-----KWETGNNLDVLTYYTPSPNLDHQRS 513  
Db 928 SMHYTITISDRLKEQLIFIDNNLVVNESIKELIYSSNIISLISNNASY-----IEG 982  
QY 514 VLFINK-----KYFLVID-----RAIGEATGNLGVHWOLKE---DSNPYFD-KTKNR 556  
Db 983 LTLINKPTTSQEVLSNYFKNLNNSVIRDSNEERLEYNKYQLYNYVFSNPYIEIKQNNN 1042  
QY 557 VYTYRDGNLMIOSLNADRTSLNEEGKVSYYVYNKELRPAPFVPEKPKXNAGTQNFVSI 616  
Db 1043 IYLTINNTNNLQASKFKLLSINPKQHV-----OKFDEV 1078  
QY 617 VYPYDQKRAPEISIREN--KGNDF-EKGKLNLTLTINGKQQLVL 657  
Db 1079 I-----ISILDNMEKYIDISEDRNLQIDNKNKAKKMI 1112

## RESULT 8

US-09-769-736-10  
; Sequence 10, Application US/09769736  
; Publication No. US20030138775A1  
; GENERAL INFORMATION:  
; APPLICANT: Microbial Technics Limited  
; APPLICANT: Le Page, Richard WF  
; APPLICANT: Wells, Jeremy M  
; APPLICANT: Hanniffy, Sean B  
; TITLE OF INVENTION: Proteins  
; FILE REFERENCE: PWC/P21089wo  
; CURRENT APPLICATION NUMBER: US/09/769,736  
; CURRENT FILING DATE: 2003-02-14  
; PRIOR APPLICATION NUMBER: GB 9816335.5  
; PRIOR FILING DATE: 1998-07-27  
; PRIOR APPLICATION NUMBER: US 60/125163  
; PRIOR FILING DATE: 1999-03-19  
; NUMBER OF SEQ ID NOS: 212  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 10  
; LENGTH: 1250  
; TYPE: PR1  
; ORGANISM: Streptococcus agalactiae  
US-09-769-736-10

Query Match 3.3%; Score 117; DB 10; Length 1250;  
Best Local Similarity 20.0%; Pred. No. 0.36;  
Matches 145; Conservative 90; Mismatches 264; Indels 226; Gaps 35;

QY 24 AQSSITRKDFD-----HINLEYSGLKVNKVAAGNVDAAKALLAYVREKSKAREPDFS 79  
Db 435 SKSLIIKGDNFKPGHFNISYNG---NNVTTRQSW-EFKDQLYAYSNGLGAVLNQDGS 489  
QY 80 NAEKPADIROP-IDKVTREMAK-----ALVHOFQPHKG-----GYF 116  
Db 490 KVE---ASLWSPSADSVTMIYDKDNQNRWATTPLVKNNKGVWQTILDTKLGIKNVTGY 547  
QY 117 ----DYGKDINQWQWPVKDNEVRWQLHRV---KWOQAM----- 147  
Db 548 VLYEIKRKDKVKILIDPYAKSLAEWDSNTVNDIDITAKAAAFVNPQSGKXNLSFAKIANF 607  
QY 148 ----ALVHYHATGDEKYAREWYQYS-DWARKNPLG-LSQDNKFPVWRPLEVSDRVQSLP 200  
Db 608 KGKQDAVIY---EAHVDRDFTSDQSLGKLNQGLGTFAAFSEKLDYLOKLGVTHIQLLP 662  
QY 201 PTFSLFVN-----SPAFTP-----AFLMEFLN 222  
Db 663 VLSFYFVNEMDKSRSTAYTSSDNNYNWGYDPQSYFALSQMYSEKPKDPSARIAELKQLIH 722  
QY 223 SYHOQA-----DYLSTHYAEOGNHELPE-AORNLFAGVSFPBFKDSPRWRTG----- 269  
Db 723 DIHKRGMSVILDVYVNHHTAKT---YLFEDIEPNY---HFMNEDGSPRESFGGGLGTH 776  
QY 270 -----ISVLNTEIKQVYADGMQFELSPIYHVAIDIFLKAYGSAKVNLEKEFP 319

Db 777 AMSRRVLVDISKILTSEFK-----VDGRFDMGMDGHDAAAEIEL-----AYKEKAIN----- 823  
QY 320 QSYVQTVENMIMALISISLPDYNTMPFGDSWIITDKNFRMAQFASWARVFPANQ----- 372  
Db 824 -----PNMI-----MIGCW-----RIFQGGQKPVKPADQDMWKSTD 856  
QY 373 AIKYFATDQKQKAPNPLSKALSNAGFYTPFRSGWKNATVMV--LKASP-----PG-- 421  
Db 857 TVGVFSDDIR-----NSLKSQFFNEGTPAFITGQSQSQLOGIFKNIKAQPGNFEADSPGDV 911  
QY 422 -EHAQPDNGTF-ELFTKGRNFTPDAGVFVYSDEAELMKLRNMYRQRIHSTLTLDNQNM 479  
Db 912 VQIARHNDLTHDVIAKSLNKDPKV-----AEEDI-----HRRLRGNVMILISQGT 959  
QY 480 VITKARQNKWETGNLNDLVLYTTPNSYPNLDHQRSLVLFINKKYFLVIDRAIGEATGNLGVH 539  
Db 960 AFTHSGQEGYGRTKLLNPDMYTKVSDKLPNKATLIEAVKEYPYFTHDSYDSSDAINHFD 1019  
QY 540 WQLKEDSNPVFDKTKRKYVITYYRDGNLMTQSLNA-----DRTSLNBEEGKVSYYVYKELK 595  
Db 1020 WAAATDNNKHPISKTQAYTA---GLITLRRSTDAPRKLSKABIDREVSILITEVGGQDIK 1076  
QY 596 RPAFV 600  
Db 1077 EKDLV 1081

RESULT 9  
US-09-802-640-32  
; Sequence 32, Application US/09802640  
; Publication No. US20030036057A1  
; GENERAL INFORMATION:  
; APPLICANT: Braun, Andreas  
; APPLICANT: Bonsal Aruna  
; APPLICANT: Kieyn Patrick  
; TITLE OF INVENTION: GENES AND POLYMORPHISMS ASSOCIATED WITH  
; TITLE OF INVENTION: CARDIOVASCULAR DISEASE AND THEIR USE  
; FILE REFERENCE: 24736-2048  
; CURRENT APPLICATION NUMBER: US/09/802,640  
; CURRENT FILING DATE: 2001-03-09  
; NUMBER OF SEQ ID NOS: 122  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 32  
; LENGTH: 4563  
; TYPE: PRT  
; ORGANISM: Homo sapien  
US-09-802-640-32

Query Match 3.3%; Score 116; DB 10; Length 4563;  
Best Local Similarity 16.3%; Pred. No. 3.3;  
Matches 104; Conservative 94; Mismatches 197; Indels 244; Gaps 26;  
QY 218 MEFLNSY-----HQOADY-----LSTHYAEQGNHRLPEA-----ORNL----- 250  
Db 3068 IDFLNNVALFLSPAQAQASQVARSARFNQYKYNQFNSAGNENIMEAHVINGEANDFLN 3127  
QY 251 -----FAGVSFPEPKDSRWRQTG----- 269  
Db 3128 IPLTIPEMRLPYTIITPPLKDFSLWEKTLGLKEPLTKTKQSFDLSVKAQYKKNKRRHSIT 3187  
QY 270 --TSVLNTEIKQVYADGMQFELSPIYHVAIDFLKAYSAGK-----RVNLEK---EFPQ 320  
Db 3188 NPULAVLCEFIQSQISKSFDRHFEKN---RNNALDFVTKSYNETKIKFKDYKAESKSHDLPR 3244  
QY 321 SYVQTVENMIMALISISLPDYNTMPFGDSWIITDKNFRMAQF-----ASWARVFPANQAIKY 376  
Db 3245 TF-----QIPGYTVFV-----NVEVSPTIEMSAFGYVFPKAVMSPS 3282  
QY 377 FATDQKQKAPNF-----LSKALSNAFG-YT 401  
Db 3283 FSLIGSDVRVPSTLILPLSLPLVHLVPRNLKLSLPHFKELCTISHIFIPAMGNITVDYS 3342  
QY 402 FRSGWKNATVMVLKASPPGGEFHAQPDNGTNGTFFELFKGNFTPDAGVFVYSDEAI----- 456

Db 3343 FKSS-----VITLNTNAELFNQSD--IVAHLSSSSSVIDALQVLEGTTLRLTRKRG 3392  
QY 457 -----MKLRNWRQRIHSTLTLDNQNMVITKARQNKWE-----TGNLNDVL 498  
Db 3393 LKATALSLSNKEVEGSHNSTVSLTTKNMEVSVAKTKAEIPILRMNFKOELNGNTSKP 3452  
QY 499 TYTNPSPNLDHQRSLVLFINKK-----YFLVIDRAIGEATGNL----- 536  
Db 3453 TVSSSEMFKYDFNSSMLYSTAKGAVDHKLSLESLTSYFSTESSTKGDVKGVSLSREYSGT 3512  
QY 537 -----GVH-----WQLKEDSNPVFDKTKRKYVITYYRDG--NNLM 568  
Db 3513 IASEANTYLSKSTRSVKLGQTSKIDDIWNLVKNENFAGEATLQRIYSLWEHSTKNHLQ 3572  
QY 569 IQSL---NADRTS---LNEEKGKVSYYVYKELKRPAPVFEKP-----KKNACTON--- 612  
Db 3573 LEGLFFTNGEHTSKATLELSPQMOSALVQVHASQPSSEFHDPLDGOEVALNANTKNQKIR 3632  
QY 613 FVSIIVPYDQGAPEISIRENKGNDFEKGKLNLTILTING 651  
Db 3633 WKNEVRIHSGSFOSQVEL-----SNDQEKALHDIAGSLEG 3667

RESULT 10  
US-10-369-493-1532  
; Sequence 1532, Application US/10369493  
; Publication No. US20030233675A1  
; GENERAL INFORMATION:  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Chen, Xianfeng  
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
; FILE REFERENCE: 38-10(52052)B  
; CURRENT APPLICATION NUMBER: US/10/369,493  
; PRIOR FILING DATE: 2003-02-28  
; PRIOR FILING DATE: 2003-02-28  
; PRIOR FILING DATE: 2002-02-21  
; NUMBER OF SEQ ID NOS: 47374  
; SEQ ID NO 1532  
; LENGTH: 1314  
; TYPE: PRT  
; ORGANISM: Saccharomyces cerevisiae  
US-10-369-493-1532

Query Match 3.3%; Score 115.5; DB 15; Length 1314;  
Best Local Similarity 18.5%; Pred. No. 0.53;  
Matches 157; Conservative 108; Mismatches 287; Indels 297; Gaps 45;  
QY 1 MTTKIPKRIIVFAVIALSSGNILAQS-----SSITRKDFHINLSEYSGLEKVNKAV 51  
Db 25 ISSKVLKLSHSHSKLSRSDLKALGSETISDPSQLTFKD-RYVENESLYLKKLAKTA 83  
QY 52 AAGNYDDAAKALLAYREKSKAREPDPFSNAEKPADIRQPIDKYVTREMAKALVHQFOPHK 111  
Db 84 LDDYTRGIKLTNRYBEDDGDDEIIRLSNG-----DRIDEIL-----HS 122  
QY 112 GYGYED---YGKIDINQMWFVKDNEVRWQ---LHRVKWQAMALVYH---ATGDEKYARE 162  
Db 123 GVKEFSTTPYCRKWR-----SDSELAWEIATEFERFKWQSMRLARVLKGDIVKGEKTRIAN 177  
QY 163 WYQYSDWAKNPLGLSQDNDKFWWRPLE-----VSDRVQSL-----PPTFSILFVNSPA 211  
Db 178 QV-----KXP-GLNKELSDLEWLKAWLNGRTWQEMEQSILTYLRDSDSVFBEIMK 228  
QY 212 F-----TPAPLMEFLNSYHQQADY---LSTHYAEQ--GNHRLFEAQ----- 247  
Db 229 FOIPQOKILSLDALEATLQOLMNRHYSHVSVWPNLKNQYKDKPITNTAEFTARIDVMSW 288  
QY 248 -----RNLFAGVSF-----PEFKDSRWRQTGISVLNTEIKQVYADG 285

Db 289 LNFKNLTLLRRQELDDWINRFPSSDNCQDFDGVPOW-NCKMKILAEQLMKEKNIES 347  
Qy 286 MQFELSPIYHVAADIFLKAYGSAKRVNLEK-----EFP-----Q 320  
Db 348 I-FQKKIFPLSPMFKLHPIVYRETLTKMNIKYPYERLRSLLAFVYLKIVELTRL 406  
Qy 321 SYVQTVENMIALISISLPDYN-----PMFGDSWITDK 354  
Db 407 SYARKLNPTMMIDQMDIDDFNAFIRLSVOLKYLTKYCSNLPFDVDFDPTFENTVI--- 463  
Qy 355 NFRMAQFASWARVFPANQAIKY-----FATDGKQG-KAPNELSK---ALSNAAGFYTF 402  
Db 464 -----BAIRYLFFLLNLKLIIDSSKQNFKAADLLLYKWDHLKNTGHIY- 505  
Qy 403 RSGWKNATVMVLKASPEGFAHQPDNGTFEL---FIKGRNFTPDAGVYVYSGDEAIMKL 459  
Db 506 -----NGAETVI-----PNEFLKTLRLVHLKQLFYLLKQONFPPTFA---NASEA--- 547  
Qy 460 RNWYQTRIHSTLTDNONMVTIKARQNKWETGNNLDVLTYNPSYPNLDHQRSLVLFINK 519  
Db 548 EKW-----LSSIFENLGAMKRLNRF---SNILVKAFQNSAVYQINHNAQV---K 592  
Qy 520 K-----YFLVDRAIGATNGLGVHW-----QLKEDSNPVDKTKNR-----VYTYRDG 564  
Db 593 KLDKAHYFLVYS---GNTFESSGVYMFAPPELLGCDNDTILRLNKSIGCDLVKPLDIG 649  
Qy 565 NNLMQSLNADRTSLN-----ELEGKYSY---VYNKELKRPAPFVEKPKKNAQTNP-- 613  
Db 650 NNLNVYDITTKETDLNIIIVSKGEDSGKIPYVRVWANSDDLDRHAHQSKKNFSDPDQ 709  
Qy 614 -----VSIYVP-----YDQKAPKPEISIRENK---GNDPEKGL- 643  
Db 710 HLDKKNNEVFEVALSGLVLYPGEVYVWDG---PVYKLPQNNLFASNEMDLGKIG 766  
Qy 644 --NLTLTIN 650  
Db 767 NPNTLILIN 775

## RESULT 11

US-09-801-368-370  
; Sequence 370, Application US/09801368  
; Patent No. US20020128250A1  
; GENERAL INFORMATION:  
; APPLICANT: Busby, Robert  
; APPLICANT: Cali, Brian  
; APPLICANT: Hecht, Peter  
; APPLICANT: Holtzman, Doug  
; APPLICANT: Madden, Kevin  
; APPLICANT: Maxon, Mary  
; APPLICANT: Milne, Todd  
; APPLICANT: No. US20020128250A1man, Thea  
; APPLICANT: Royer, John  
; APPLICANT: Salama, Sofie  
; APPLICANT: Sherman, Amir  
; APPLICANT: Silva, Jeff  
; APPLICANT: Summers, Eric  
; TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi  
; FILE REFERENCE: 109272.147  
; CURRENT APPLICATION NUMBER: US/09/801,368  
; CURRENT FILING DATE: 2001-03-07  
; PRIOR APPLICATION NUMBER: US 09/487,558  
; PRIOR FILING DATE: 2000-01-19  
; PRIOR APPLICATION NUMBER: US 60/160,587  
; PRIOR FILING DATE: 1999-10-20  
; NUMBER OF SEQ ID NOS: 440  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 370  
; LENGTH: 1331  
; TYPE: PRT  
; ORGANISM: Saccharomyces cerevisiae  
US-09-801-368-370

Query Match 3.3%; Score 115.5; DB 9; Length 1331;  
Best Local Similarity 18.5%; Pred. No. 0.54;  
Matches 157; Conservative 108; Mismatches 287; Indels 297; Gaps 45;

Qy 1 MTTKIFKRIIVFAVIALSSGNILAQ-----SSITRKQDFDHINLEYSLEKVNKAV 51  
Db 25 ISSKLVKLSHSHSLRSDLKALGGSETISDGSQLTFFD-RVFNESLYLKKLKT 83  
Qy 52 AAGNYDDAAKALLAYVREKSKAREPDFSNAEKPADIROPIDKVTREMAKADALVHOQPHK 111  
Db 84 LDDYYTRGIGKLTNRVEEDGDDEIIRLSNG-----DRIDEDL-----HS 122  
Qy 112 GYGVPD---YKGDINWQMPVKDNEVRWQ---LHRVKWQWQALVYH---ATGDEKYARE 162  
Db 123 GVKFFSTTTPYCRKMR-----SDSDELAWEIATERFKWOSMLARVLKGDIVKGETRIAN 177  
Qy 163 WYQYSDWARKNPLGLSQDNDKFWVRPLE-----VSDRVQSL-----PPTFSLFVNSPA 211  
Db 178 QV-----KKP-GLNKELSDIEIWLKAWLNGRTMQEMEQSLTYLDRSSDSVFEIIMK 228  
Qy 212 F-----TPAFIMEFINSVHOQADY---LSTHYAQ--GNHRLFEAQ----- 247  
Db 229 FQIPQKILSLDALEAILQDLNRYHVSVYWPNLKMYKDKPITNTAEFTARIDVWNSW 288  
Qy 248 -----RNLFAGYSF-----PEFKDSPRWQGTGISVLNTEIKKQVYADG 285  
Db 289 LNFKNLTLLRRQELDDWINRFPSSDNCQDFDGVPOW-NCKMKILAEQLMKEKNIES 347  
Qy 286 MQFELSPIYHVAADIFLKAYGSAKRVNLEK-----EFP-----Q 320  
Db 348 I-FQKKIFPLSPMFKLHPIVYRETLTKMNIKYPYERLRSLLAFVYLKIVELTRL 406  
Qy 321 SYVQTVENMIALISISLPDYN-----PMFGDSWITDK 354  
Db 407 SYARKLNPTMMIDQMDIDDFNAFIRLSVOLKYLTKYCSNLPFDVDFDPTFENTVI--- 463  
Qy 355 NFRMAQFASWARVFPANQAIKY-----FATDGKQG-KAPNELSK---ALSNAAGFYTF 402  
Db 464 -----BAIRYLFFLLNLKLIIDSSKQNFKAADLLLYKWDHLKNTGHIY- 505  
Qy 403 RSGWKNATVMVLKASPEGFAHQPDNGTFEL---FIKGRNFTPDAGVYVYSGDEAIMKL 459  
Db 506 -----NGAETVI-----PNEFLKTLRLVHLKQLFYLLKQONFPPTFA---NASEA--- 547  
Qy 460 RNWYQTRIHSTLTDNONMVTIKARQNKWETGNNLDVLTYNPSYPNLDHQRSLVLFINK 519  
Db 548 EKW-----LSSIFENLGAMKRLNRF---SNILVKAFQNSAVYQINHNAQV---K 592  
Qy 520 K-----YFLVDRAIGATNGLGVHW-----QLKEDSNPVDKTKNR-----VYTYRDG 564  
Db 593 KLDKAHYFLVYS---GNTFESSGVYMFAPPELLGCDNDTILRLNKSIGCDLVKPLDIG 649  
Qy 565 NNLMQSLNADRTSLN-----ELEGKYSY---VYNKELKRPAPFVEKPKKNAQTNP-- 613  
Db 650 NNLNVYDITTKETDLNIIIVSKGEDSGKIPYVRVWANSDDLDRHAHQSKKNFSDPDQ 709  
Qy 614 -----VSIYVP-----YDQKAPKPEISIRENK---GNDPEKGL- 643  
Db 710 HLDKKNNEVFEVALSGLVLYPGEVYVWDG---PVYKLPQNNLFASNEMDLGKIG 766  
Qy 644 --NLTLTIN 650  
Db 767 NPNTLILIN 775

## RESULT 12

US-10-130-973A-8  
; Sequence 8, Application US/10130973A  
; Publication No. US20030147895A1  
; GENERAL INFORMATION:  
; APPLICANT: Shone, Clifford  
; APPLICANT: Sutton, John



```

; APPLICANT: Silman, Nigel
; TITLE OF INVENTION: Constructs for Delivery of Therapeutic Agents to Neuronal Cells
; FILE REFERENCE: 1581.0920000
; CURRENT APPLICATION NUMBER: US/10/130,973A
; CURRENT FILING DATE: 2002-10-21
; PRIOR APPLICATION NUMBER: PCT/GB00/04644
; PRIOR FILING DATE: 2000-12-04
; PRIOR APPLICATION NUMBER: GB 9928530.6
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: GB 008658.7
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 645
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-10-130-973A-8

```

```

Query Match      3.3%; Score 114.5; DB 14; Length 645;
Best Local Similarity 17.8%; Pred. No. 0.22;
Matches 95; Conservative 72; Mismatches 189; Indels 179; Gaps 24;

QY 219 EFLNSHQADYLSTHYABQGNHRLFEAQNLFAGVSPFEKDSRWRQTGIVLNTETIK 278
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 54 QYLEEPHQTA---LEHPSELKTVGTGTPVAGANY-----AAMAVNAQVIDSETA 103
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 279 KOYVADGMQFELSP-----LYH-----VAADIEFKAYGSAKRVNLEKEP---- 318
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 104 DNLEKTTAALSLDGLGSGVNGIADGAVHHNTEIVAQSIALSLMVAQAIPLVGELVDIG 163
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 319 --PQSVQVQVENMIMALISLSDPYNTPMFGDSWITDKNPRMAQFASWARVFPANQ--- 372
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 164 FAAYNFVESTINLFQVVHN---SYNRPAYSPGHKTQPFLLHDGVAVSWNTVTRTMSYTD 219
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 373 --AIKPTADGKGKAPNFSLKALSNAAGFTFRSGMDKXATVMVLKASPPGEFHAOPDNG 430
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 220 KILILYFNKLYKKIKONSLIDMRVENNKFTDI-SGYGSNTSI-----NG 262
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 431 TPELFIKGRNFTPDAGVF-----VYSGDEALMKLRWYRQTRIHSITLTD 475
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 263 DVVIYSTNRN---QFGLYSSKPSSEVNAQNNDIYNGRYONFSISEWVRIPKYNKVLN 319
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 476 NQNVITKARQNK--WETGNLNDVLTNTPSYPNLHQRSVL-----FINKKYFL 523
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 320 NEYTIIDCIRNNSGKISLNYNKLIWTLODTAG-NNQKLVENYQTMISISDYINKWIFV 378
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 524 VI-DRAIGEA-----TGNLGVHWQLKEDSN-----PVF 550
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 379 TITNNLGNRIYINGNL---IDKXISNLGDHIVSDNILFKIVGNCNDRIVGIRYKPVF 435
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 551 DKT--KNRVVTVTRD-----GNLMIQS-----LNADRT-----SLNEE 582
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 436 DTELKTEITLXSDPEPDSILKDFWNGYLLYKRYLLNLLRDKSITQNSPFLNINQ 495
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 583 EGVSVYVYNKELKRPAPVFEKPKKNAGTQNFVSIVPYDQGAPEISIRENKGD 637
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 496 RG-----VYQKPNIFSNTRLTYGTG-----EVIIRKNGSTD 525
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

RESULT 13

```

US-09-882-227-388
; Sequence 388, Application US/0988227
; Publication No. US20030158396A1
; GENERAL INFORMATION:
; APPLICANT: Kleanthous, Harold
; APPLICANT: Al-Garawi, Amal
; APPLICANT: Miller, Charles
; APPLICANT: Tomb, Jean-Francois
; APPLICANT: Coomen, Raymond P.
; TITLE OF INVENTION: Identification of Polynucleotides

```

```

; TITLE OF INVENTION: Encoding No. US20030158396A1el Helicobacter Polypeptides in the
; TITLE OF INVENTION: Genome
; FILE REFERENCE: 06132/047002
; CURRENT APPLICATION NUMBER: US/09/882,227
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: US 08/902,615
; PRIOR FILING DATE: 1997-07-29
; NUMBER OF SEQ ID NOS: 638
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 388
; LENGTH: 1279
; TYPE: PRT
; ORGANISM: Helicobacter pylori
; US-09-882-227-388

```

```

Query Match      3.3%; Score 114.5; DB 10; Length 1279;
Best Local Similarity 18.4%; Pred. No. 0.63;
Matches 136; Conservative 107; Mismatches 254; Indels 241; Gaps 36;

QY 39 LEYSGLEKYNKAVAGNYDDAA--KALLAYYREKSKA-----73
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 78 IEFKALKNPNEFIKGDNLNVKAPFHELSLSYLTTERKEGNNLKLILATIKELYIIDANEF 137
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 74 ---REPDFSNAEKPADIRQPIDKVTREMAKALVHQFQPHKGYGFDYCKDINQWQWVPV 129
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 138 EVENKDKETENAFKCHDRKNDTRTKAFYDAC-----QKRLNEFD--RSUKYHYIPL 188
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 130 KONEVRWQLHRVKWQAMALVYHATGDEKYAREWVYQYSDWARKNP-----LGLSQ 180
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 189 KK-----ENLALIYQALSPLK--IPKYSANTLNKDFYBELLYILGLEE 233
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 181 DND--KFVWRPLEVSRVQSL-----PTFSLFV--NSPAPTAPLMEFLNSY-H 225
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 234 QNDKGKILIKPSRTQNSLDALKKEYKNDDEEVNALLTANNRILFLRLLESLLTSFKH 293
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 226 QQADYLSHYAEQGNH---RLER--AQRNLFAGVSPPEKD-----SPRWQTG 269
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 294 FENPELTTNFENFNLDLTLFFEVLAKN---SERLPEIKEDKILEKIPVLSLSLFDKTP 350
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 270 ISVLNTEIKQVYADGMQFEL-----SPIYHVAADIFLKAYG-SAKRVN 313
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 351 LELKGHEIK--LLDNKLEIYKNSVLKXKHDYQKEKPLLLKYLKFLRLYKFTTTPKD 407
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 314 LEKEFPQSVQVQVENMIMALISLSDPYN---TMFGDSWITDKNF-----RNAQFA 362
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 408 IKDNTDTSERLINPNSVLGLVFEKNGYKESGYTFPSFITSYMKESITPVLDFKNALY 467
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 363 SW-----ARVFPANQAIKYFAT-----DGKQKAPNPLSKALS----- 396
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 468 QWDCENLKALRGIDRNFSEKAKYVNTLLTLCIDPAVGGSG-HFLVLSALNEMVRVAYE 526
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 397 ---AGFYFRSGWDKNATVMVLKASPPGEF--HAQPDNGT-----PELFIKGRNFTP 443
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 527 LGLIASLRYDLKLENDE--IIHHPTGTGFIYVYKPSDSEDPHHHFKELFLNKKLSIE 584
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 444 DA--GVFVSGDRAIMKLRWYRQTRIHSITLTDNQNMWITKARQNKWETGNLNDVLTYT 501
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 585 NCLFGVDINPNSCEITKRLW-----IELKYSYIFEGKGNLAL---625
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 502 NPSVBNLDHQRSVLFNKK-----YFLVIDRAIGCATGNLGVHWOLKE----- 544
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 626 -ETLPNID-----INIKANSLSIRFALKKALKKSEKKNLEYSIAYKELVLKYKD 677
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 545 -----DSNPFVFKTKNRVYTVTRDGNLMIQSLNAD--RTSLNEEKGKSVVYN 591
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 678 PKILETLTHPEIKDSNAVRKYAKERLYQELK-----QNEKDFKKALNDRIEKIKAFK 730
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 592 -----KELKRPAPVFE 602
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 731 LTLNPPPKELKFKKFLKE 748
    : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

RESULT 14

US-10-369-493-13471  
; Sequence 13471, Application US/10369493  
; Publication No. US20030233675A1  
; GENERAL INFORMATION:  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Chen, Xianfeng  
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES  
; FILE REFERENCE: 38-10(52052)B  
; CURRENT APPLICATION NUMBER: US/10/369,493  
; PRIOR FILING DATE: 2003-02-28  
; PRIOR APPLICATION NUMBER: US 60/360,039  
; PRIOR FILING DATE: 2002-02-21  
; NUMBER OF SEQ ID NOS: 47374  
; SEQ ID NO 13471  
; LENGTH: 871  
; TYPE: PRT  
; ORGANISM: Thermoplasma volcanium  
US-10-369-493-13471

Query Match 3.3%; Score 114; DB 15; Length 871;  
Best Local Similarity 18.2%; Pred. No. 0.39;  
Matches 136; Conservative 94; Mismatches 261; Indels 256; Gaps 31;  
QY 66 YREKSKAREPDSNAEK-PADIRQIDKVTREMAKALVHQFQPHKGYGFDYDKDINW 124  
DB 10 YYYPLNKIL--DGKREKLEPSRLILLESVMRNLDRSITQD-----DIDAIYNW 57  
QY 125 QMPVPKDNVRLQHRVQWQAMALVYHATGDEKYAREWVYQYSDWARKNPLIGLSQDNX 184  
DB 58 NPSNVPDKERFKVSRV-----VMQD--- 78  
QY 185 FWRPLEVSDRVQSLPFTSLFVNSP-AFTPAFLMEFLNSYHQADYLSTHYAEGNHL 243  
DB 79 FTGVPAVVD--LASMRDVTVKLGKDPQLNPOVRVDLVIDHSQVDYVYGESFATEKNEEL 136  
QY 244 FEAORNL-----FAGVSPFEK----- 260  
DB 137 -EFNRNLERYFLKWAQSFKNFRVIPPGTGIIHQVNLLEYLAEVIFDYEEKRYAYPDT 195  
QY 261 ----DSPRWRTGISVLN-----TEIKQVYADGMQFELSPIYVHAAI 299  
DB 196 LVGTDSTHTMINGIGLVGWGVEAEALIGQITISLPEVIGVRLHGLNP- GVTAT 253  
QY 300 DIFLKAYGSAKRVNLEKEFPPOSYQVTVENMIM--ALISISLPDYNTPMFGDSWITDKNF 356  
DB 254 DLVLTTITELLKRVNVVDKFEVFFGSPVKYLSVPERATVSNMCPBYGATL----- 302  
QY 357 RMAQFASWARYPPA-NOAIKYFATDGGKQKAPNLSKALSNAAGFTFPGSGWKN----- 409  
DB 303 -----ALFFIDDDQLDYLRTGRSDHKIKIKKYLELQGMFGESEGEYTKVLDLD 353  
QY 410 -ATVNLKASP-----PGEFHAQPDNGT-----FELFKGRNFTPDAGV 447  
DB 354 LSTVKPSVAGPKLQORLDLDQVPSFLSSVESNSDSLVSRLKVPLKLGQD-----V 407  
QY 448 FVYSGDEALMLRNWYQTRIHSTLTLDNQNVITKARQNKWETGNLDVLTYNPSYPN 507  
DB 408 ELSGDIVIAAITSC--TNTSNFYVMLAAGLVAKA-----VELGLKVNPKVK 454  
QY 508 -----LDHQRSVLFPINKKYFLVIDRAIGETGNLGV-----HWQLKEDSNPV 549  
DB 455 SLAPGSRVVTLYLTESGLIDYLDKGLFVLVYGCTTCIGNSGPLDKQVDIAIIRNNLVV 514  
QY 550 FDKTKNRVYTF--YRD--GNLMTIQ-----SLNADRTSLNEEGKSVYV----- 589  
DB 515 SVLSGNRNFARIHKDKVANKYVLPPLVAVAIAGNITINLDKPLGEVNGKKIYLDIOW 574  
QY 590 -----YNKELKRPFAFVPEKPKNAGTGNFVSI-----VTPYQOQKAPETISIRENK 634

DB 575 PSNNEIKDAVNKYKKE--MYEKRYGNITNKRWESIDVPESPVYVNW-----ESSTYIRN 627  
QY 635 GNDPEKGKLN---LTLTINGKQQLVLV 658  
DB 628 PPFENFKLNBLLISTFSVKGAYPLLI 654  
RESULT 15  
US-10-369-493-5864  
; Sequence 5864, Application US/10369493  
; Publication No. US20030233675A1  
; GENERAL INFORMATION:  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Chen, Xianfeng  
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES  
; FILE REFERENCE: 38-10(52052)B  
; CURRENT APPLICATION NUMBER: US/10/369,493  
; CURRENT FILING DATE: 2003-02-28  
; PRIOR APPLICATION NUMBER: US 60/360,039  
; PRIOR FILING DATE: 2002-02-21  
; NUMBER OF SEQ ID NOS: 47374  
; SEQ ID NO 5864  
; LENGTH: 899  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-10-369-493-5864

Query Match 3.3%; Score 114; DB 15; Length 899;  
Best Local Similarity 17.8%; Pred. No. 0.41; Indels 220; Gaps 34;  
Matches 120; Conservative 100; Mismatches 236;  
QY 14 VIALSSGNILAQSSSITRKDPFHINLEYSGLEKYNK---AVAAG-----NYDDAAK 61  
DB 291 LLALCVGH-FSNLATVITRTVLTWVWISMGWEQYGEFALNVTAGTIDPMENYFSDFLK 349  
QY 62 AL-----LAYREKSKARE-----PDFSNAEKPADIRQIDKVTREMAK 102  
DB 350 KLDVWALPEYTMNAGAMENWGLIICEYSLFMFDPDYATR---DITEVAETTAHE----- 401  
QY 103 LVHQFQPHKGYGFDYDKDINWQMPVKDNVRLQHRVQWQAMALVYHATGDEKYARE 162  
DB 402 VVHOW-----FGDIVTLDWV---NDIFLNEGFAQYWFANGI-----DNTFPEQ 441  
QY 163 WYQYSDWAR--KNPLGLSQDNDFVWRPLEVSDRVQSLPFTF-----SLFVN--SP 210  
DB 442 HAYSI-DYNRFYMHIALKYDCIFGAKPV-----ISDTPFVFGIEPYKGSALLNLNN 495  
QY 211 AFTPAFLMEFLNSYHQADYLSTHYAEGNHLFEAQRNLFAQVSPFPEKDSPRWQTGI 270  
DB 496 VLTPEAVFQEGSLSSYLTYGYVNA-----SPRNL-----WTSLTV 529  
QY 271 SVLNLTEIKQVYADGMQFELSPIYHAAIDIFLKAYGSAKVNLEKRP-----QSY 322  
DB 530 AQRHNITDW--NQQLDVSS-----FMDPY-----TLQTSPIITLTLTGST 571  
QY 323 VQTVENMIMALISISLPDYNTPMFGD-----SWITDKNFRMAQFASWARYPPANQAIK 375  
DB 572 VQANQSCMSDETL---WNVPLFTQTPGALDFNKFV--NFTGGNDATWLRPLTGYRV-- 624  
QY 376 YFATDGGKQKAPNLSKALSNAAGFTFPGSGWKNATVNLKASPPGEFHAQPDNGTFLF 435  
DB 625 -----DNAGSTSPARINDYDKSWISYQAQLLSNMNTM-----SSTRAML 664  
QY 436 IKGRNFTPDAG-----VFVYSGDEALMLRNWYQTRIHSTLT-----T 473  
DB 665 LDDANFFYQSGRWEMTKFLDLTLVNVED-----SLAPWEQAEFFETMLNRFQYQPELDT 720  
QY 474 LDNQNVITKARQNKWETGN--LDVLTYNPSYPNLDHQRSVLFPINKKYFLVI 525

Db 721 VRNYVIQITKNAVSKFQWNTNGLWANDRIVQLLVNNNNLAVNRQSRQVALTLFNNFVLKC 780  
QY 526 DRAIGEATGNLGVHWOLKE-----DSNPVFD-KTKNRVYTTY-----RDGNNLM 568  
Db 781 KYLSGTCGKCSGHPNLRQPTYCYGLRQSNIDDFTTVNNLYSMFVQVQACGYLOTDSNLL 840  
QY 569 -----IQSLNADRTSL 579  
Db 841 NALGCVQNLDLQKTML 856

Search completed: March 10, 2004, 15:05:33  
Job time : 42 secs

This Page Blank (uspto)